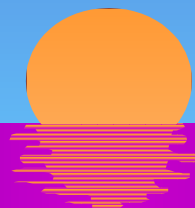
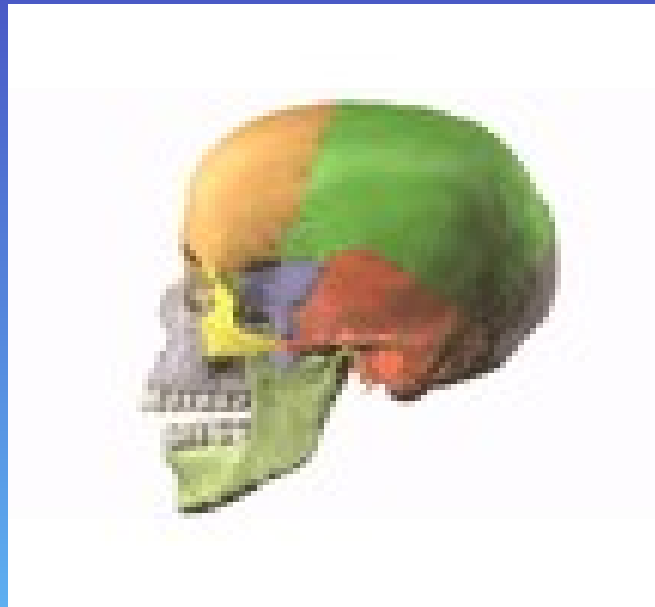


Role of the Operating Room Specialist in Oral, Maxillofacial, or Craniofacial Surgery

SSG LASSITER



Anatomy of the Skull.



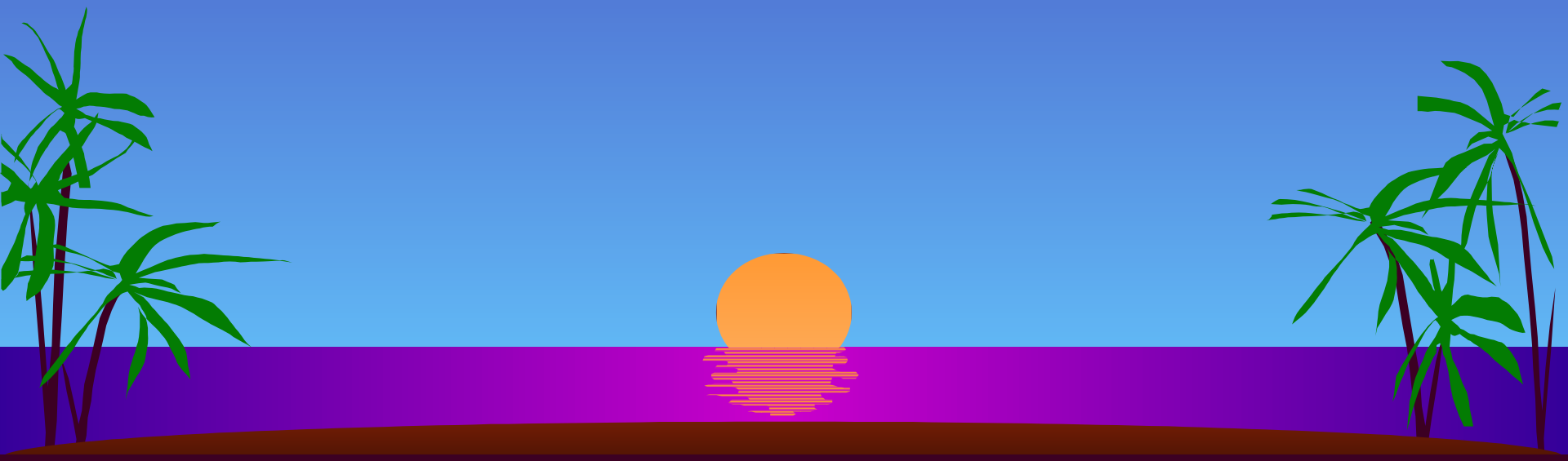
Definitions.

- ▲ Oral surgery - Surgical procedures on the teeth or mouth.
- ▲ Maxillofacial surgery - surgical procedures on the bones of the lower face (upper and lower jaws).

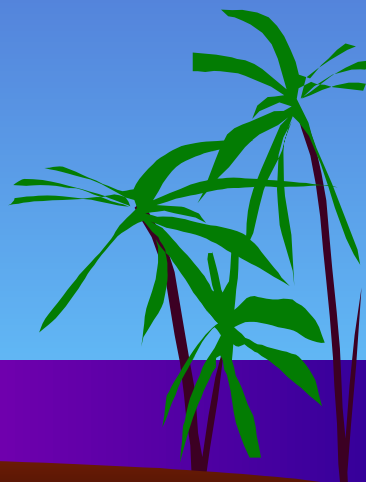


Definitions.

- ▲ Craniofacial surgery - surgical procedures on the bones of the upper (orbits, nasal bones, and zygoma) and middle face.

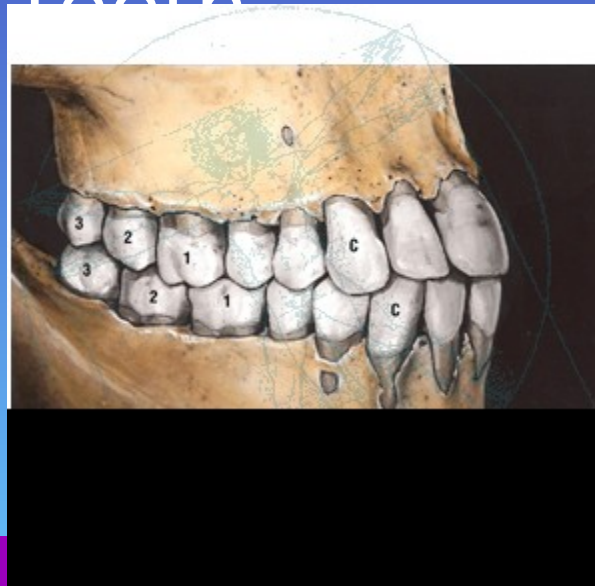


Reasons for oral,
maxillofacial, or
craniofacial surgery.



Oral surgery.

- ▲ Extraction of one or more teeth due to disease.
- ▲ Dental implants to replace extracted teeth



Maxillofacial and craniofacial surgery.

- ▲ Reduction of fractures.
- ▲ Cosmetic correction of congenital or acquired defects.
- ▲ Correction of defects related to disease processes (ie. cancer).



Maxillofacial and craniofacial surgery.

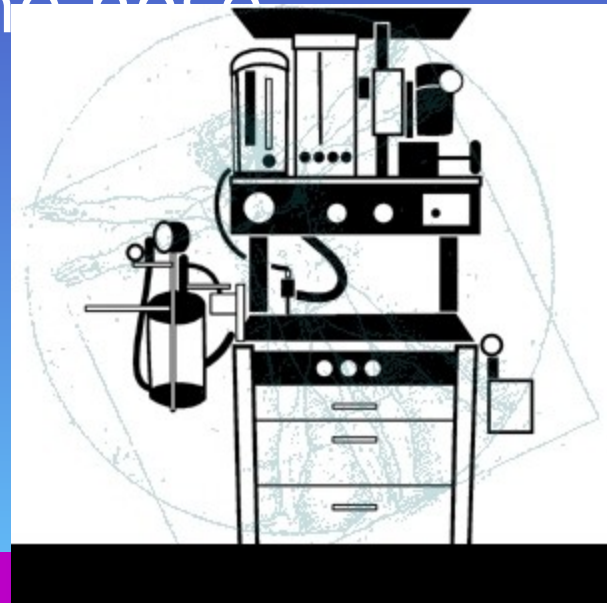
- ▲ Restoration of function (ie. correction of dental occlusion or repair of temporomandibular joint [The mandible is attached to the skull by this joint] to face (smiling)).



Anesthesia.

▲ Anesthesia-

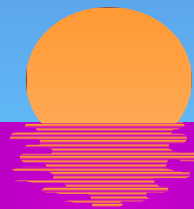
- Usually general anesthesia.
- Tube may be inserted through the mouth or through the nose.



Positioning

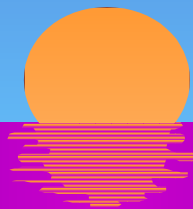
▲ Position.

- Supine position (or modification).
- Procedures may be long; make sure that all pressure points are well padded.



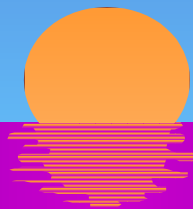
Prep and Draping

- ▲ Prep - may be as simple as application of Betadine paint/solution to the face.
- ▲ Draping - standard head drape.



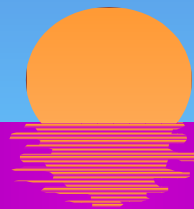
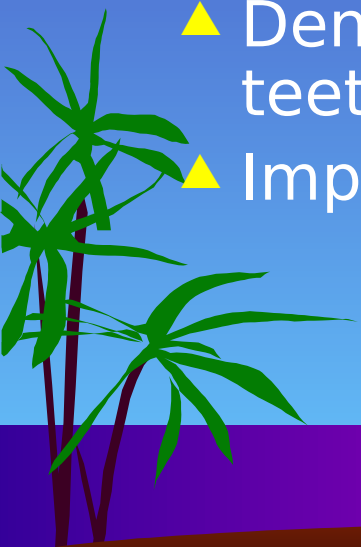
Incisions

- ▲ Intra-oral incisions are preferred so that scars are not produced on the face. If not possible, surgeons will try to make incisions where they will be hidden (ie. in the eyebrow or under the jaw line).



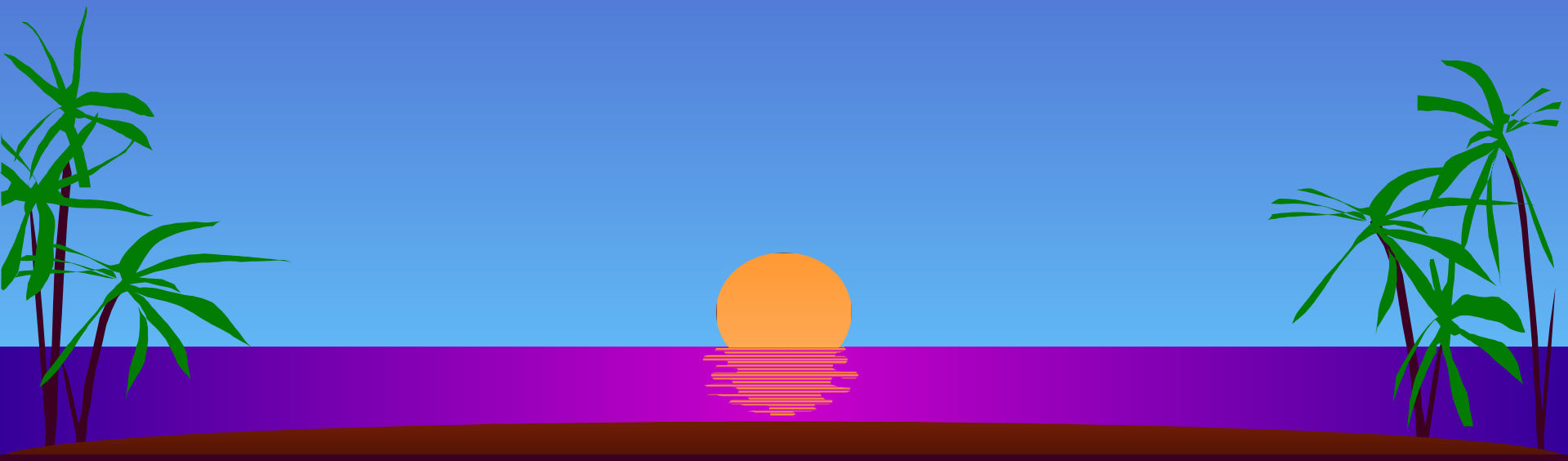
Commonly used instruments.

- ▲ Basic Plastic set - contains instruments needed to make incisions, clamp and cut tissue, suture, etc.
- ▲ Facial Fracture set- contains instruments to dissect, clamp, and retract, also used to place wires to immobilize fractures.
- ▲ Dental set - has instruments needed to extract teeth.
- ▲ Implant sets (plates and screws).



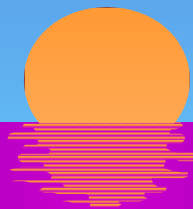
Equipment.

- ▲ Saws to cut bone.
- ▲ Drills to make holes for screws or wires.



Supplies.

- ▲ Sequential Compression Device (SCD)/anti-embolism stockings/devices.
- ▲ Extra wire cutters to be sent with the patient.
- ▲ Silastic sheeting material.
- ▲ Assorted sizes of wire.



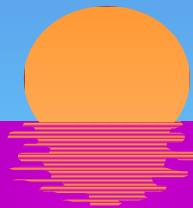
Suture.

- ▲ Surgeon's choice.
- ▲ Usually small cutting needles.
- ▲ Often absorbable suture except for some skin closure.



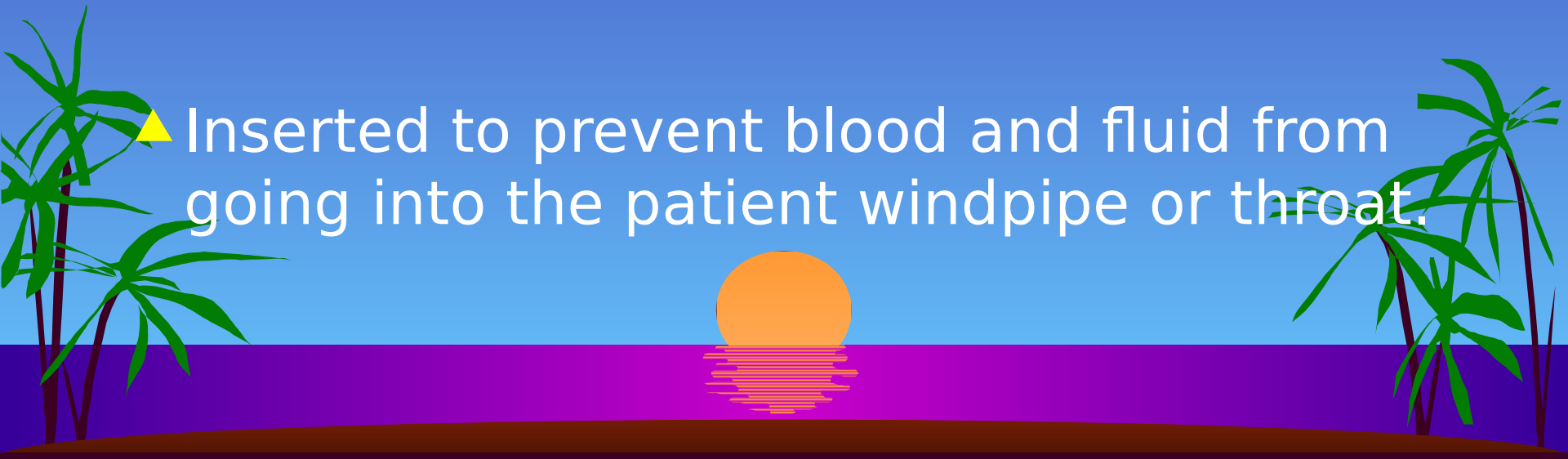
Medications.

- ▲ Local anesthetic with epinephrine to produce local vasoconstriction (reduction of size of blood vessels) and reduce bleeding from the incision site.
- ▲ Bacitracin ointment



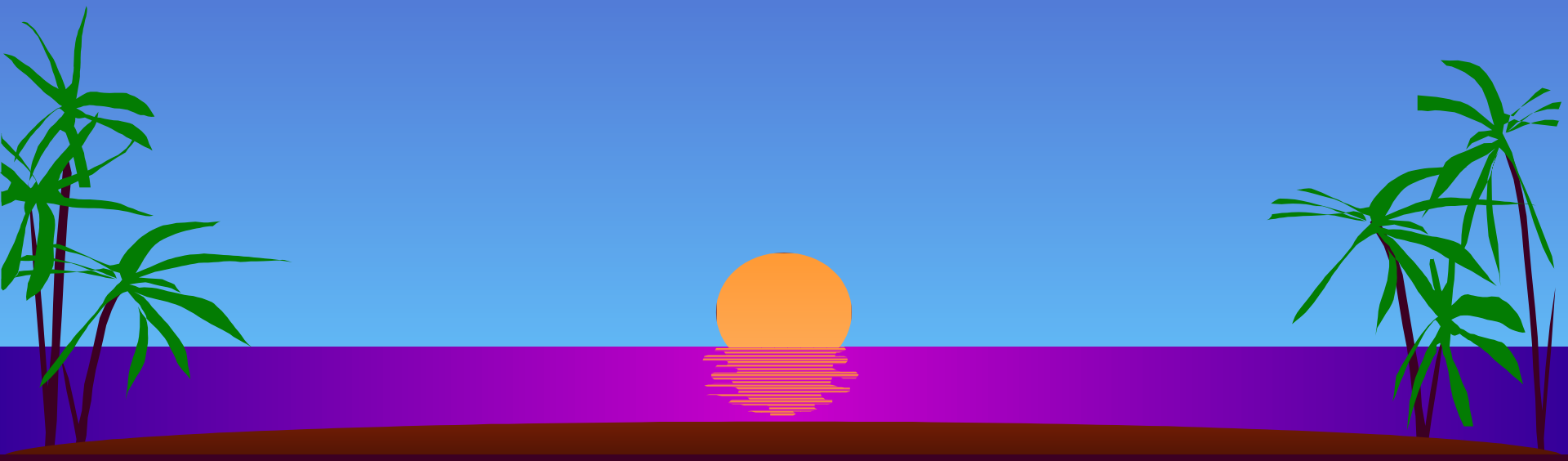
Oral Surgery - Extraction of teeth.

- ▲ May extract one, a few, or all teeth. If all teeth are extracted the procedure is called a full mouth extraction.
- ▲ A Moist throat pack is inserted.
- ▲ Inserted to prevent blood and fluid from going into the patient windpipe or throat.



Oral Surgery - Extraction of teeth.

- ▲ Local anesthetic with epinephrine
- ▲ Incision made into gingival (gum) at base of tooth.



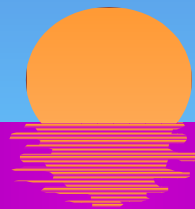
Oral Surgery - Extraction of teeth.

- ▲ Special extraction forceps maybe used.
- ▲ The mouth is irrigated with saline and suctioned to remove excess blood.
- ▲ Gingival incisions are closed.
- ▲ **Throat pack is removed.**



Maxillofacial Procedures.

- ▲ Application of arch bars for fractures of the mandible or maxilla.
- ▲ Small gauge (24-26 gauge) wires are inserted.



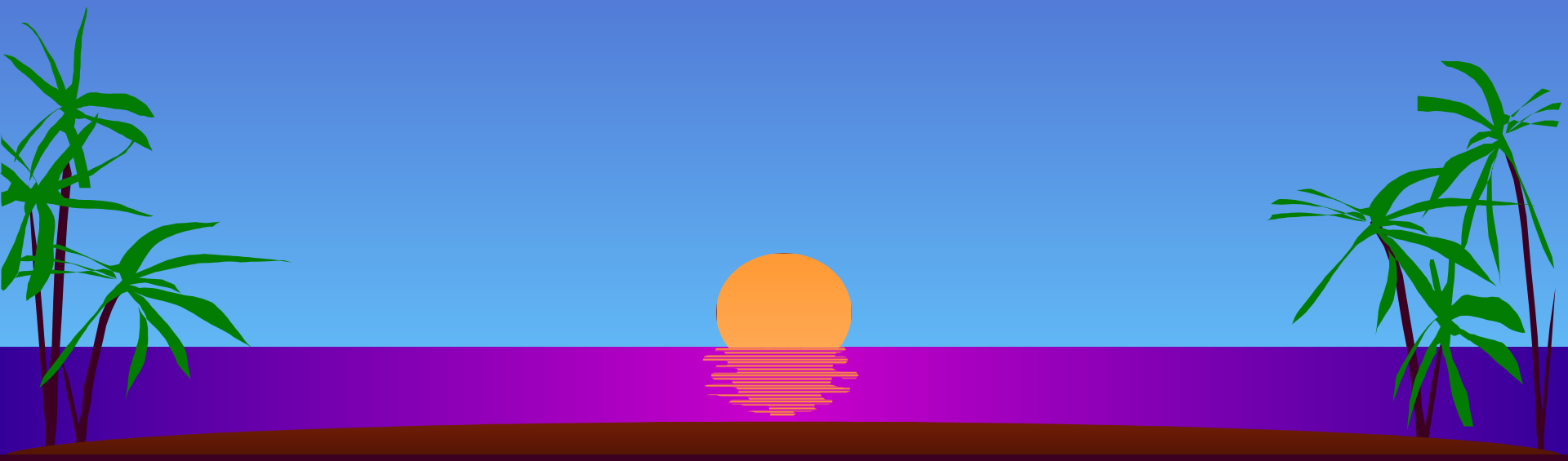
Maxillofacial Procedures.

- ▲ Arch bars may be used alone as a treatment or in conjunction with other surgical procedures, such as direct immobilization of fractures using wires or plates and screws.



Maxillofacial Procedures.

- ▲ The bands immobilize the jaws with the mouth closed and the teeth together to allow for healing of the fractures.



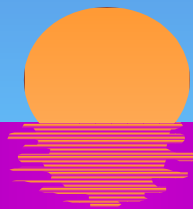
CAUTION:

- ▲ It is essential to send wire cutters or scissors with these patients when they leave the OR. They are to cut the bands if the patient should vomit or have difficulty breathing - a true emergency!



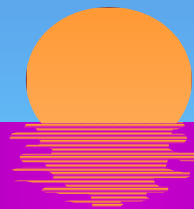
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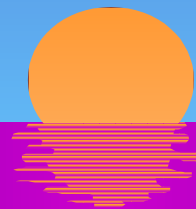
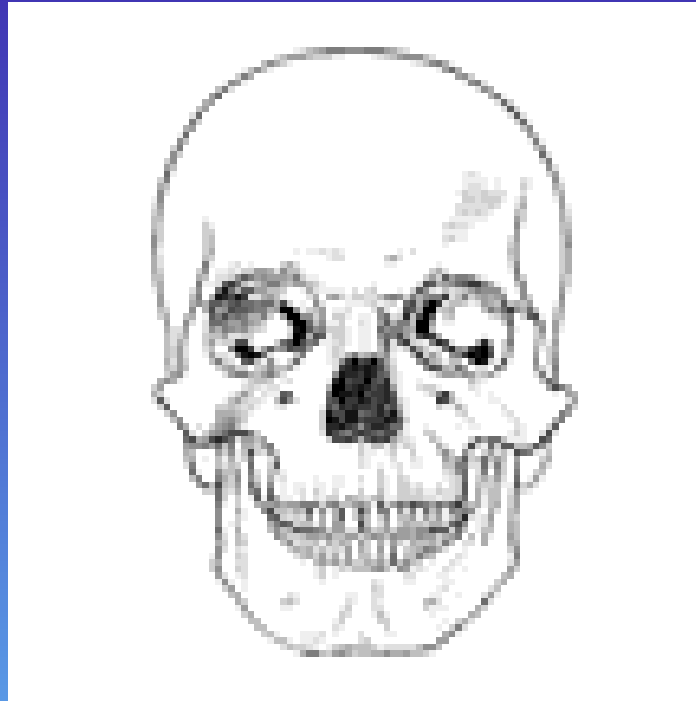
- ▲ If arch bars are placed in conjunction with another procedure, the arch bar set-up (done in the contaminated mouth) needs to be kept completely separate from the set-up for the other procedure.



Maxillofacial Procedures.

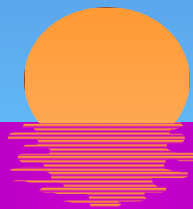
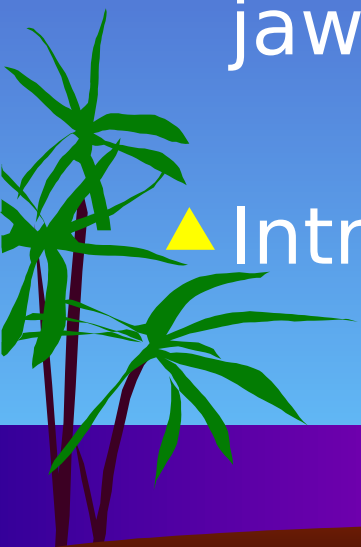
- ▲ LeFort (maxillary) or mandibular (sagittal split) osteotomies for correction of bite or to improve appearance (Orthognathic surgery: ortho - straight and gnathos - jaw).





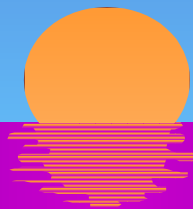
Maxillofacial Procedures.

- ▲ May do either of the procedures (maxillary or mandibular osteotomies)
- ▲ Arch bars may be applied before or after the procedure to immobilize the jaws during healing.
- ▲ Intra-oral incisions



Maxillofacial Procedures.

- ▲ Cuts (osteotomies) made through the bones on both sides of the maxilla and/or mandible
- ▲ Freed portions of bones moved as needed to establish correct occlusion of teeth; fixed into desired position with plates, screws, wires, etc.



Craniofacial Procedures.

- ▲ Reduction of mid-facial fractures.

- ▲ Zygomatic arch fractures.

- ▲ Orbital fractures



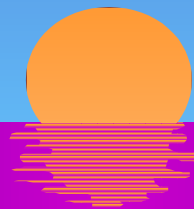
LeFort Procedures

- ▲ LeFort I- Fractures across the maxilla and the least severe.
- ▲ LeFort II- Triangular shaped fracture across the maxilla and the up both sides and across the nose.
- ▲ LeFort III- Most severe, also known as Craniofacial dysfunction, face appears caved-in.



Possible Complications

- ▲ Psychological trauma
- ▲ Airway compromise due to postoperative edema
- ▲ Sensory impairment related to traumatic injuries



??? Questions ???

